

IN THE CLAIMS:

1. (Currently Amended) An apparatus for interfacing video information, comprising:

a main body, which outputs a video signal and corresponding display type information, the display type information including a ~~display code that designates a display type and~~ recognition code for designating a kind of the corresponding display type information, and data corresponding to the recognition code; and

a monitor, which detects a display type of the corresponding video signal in accordance with the display type information, and displays the video signal outputted from the main body in accordance with the detected display type.

2. (Currently Amended) A video interface, comprising:

a main body, which outputs a video signal through a video signal line, and outputs information relating to the video signal display type ~~through a communication line,~~ the information relating to the video signal display type including a display code that designates the video signal display type, wherein the display code comprises a recognition code for designating a kind of the corresponding video signal display type information, and the information corresponding to the recognition code; and

a monitor, which detects the display type of the corresponding video signal in accordance with the display information, and displays the video signal outputted from the main body in accordance with the detected display type.

3. Currently Cancelled

4. (Currently Amended) An apparatus for interfacing video information in a computer system, comprising:

a main body, which outputs a video signal, a horizontal sync signal, and a vertical sync signal, ~~at least one of which carries~~ and video signal display type information identifying a video type of the video signal, the video signal display type information including a display code that designates the video signal display type, wherein the video signal display type information is divided to comprise divided display type information having at least two parts, and wherein the divided display type information is embedded into the horizontal sync signal and at least one of R, G, and B video signals forming the video signal, respectively; and

a monitor, which detects the type of display for the corresponding video signal in accordance with the display type information, and displays the outputted video signal in accordance with the detected display type.

5. (Currently Amended) A video interface, comprising:

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a main body, which provides information relative to a display type of a video signal, the information being divided to comprise divided display type information having at least two parts, wherein a first part of the divided display type information is embedded into one of a horizontal sync signal and a vertical sync signal, and wherein a second part of the divided display type information is embedded into at least one of R, G, and B video signals comprising the video signal, respectively ~~embedded in at least one of a video signal and a horizontal sync signal, and outputs the video signal, the horizontal sync signal, and the vertical sync signals~~ signal; and

a monitor which detects the display type of the corresponding video signal in accordance with the display type information outputted from the main body, and displays the video signal in accordance with the detected display type, ~~where in~~ wherein the information relative to the display type comprises a display code that designates the video signal display type.

6. Previously Cancelled

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8. (Currently Amended) A method of interfacing video information, comprising:
transmitting video signal display type information, ~~from a main body to a~~
~~monitor through one of the horizontal and vertical sync signals, and a video signal from a~~
main body to a monitor, the video signal display type information being divided to comprise
divided display type information having at least two parts, and wherein a first part of the
divided display type information is embedded into one of the horizontal sync signal and the
vertical sync signal, and wherein a second part of the divided display type information is
embedded into at least one of R, G, and B video signals comprising the video signal,
respectively, and communication data, the video information display type information
including a display code that designates a video display type; and

detecting a display type of the video signal transmitted from the main body
using the video signal display type information, and displaying the video signal to match the
display type.

9. (Currently Amended) The method as claimed in claim 8, wherein the display
type information ~~includes~~ comprises a recognition code for designating a kind of the
corresponding display type information, and data corresponding to the recognition code.

10. (Original) The method as claimed in claim 9, wherein the recognition code is
composed of two bits.

11. (Original) The method as claimed in claim 9, wherein the data includes a number of dots in a horizontal period, a number of backporches in the horizontal period, a number of horizontal lines in a vertical period, and a number of horizontal lines of a backporch in the vertical period.

12. (Currently Amended) A method of interfacing video information, comprising:
transmitting display type information of a video signal in communication data, along with the horizontal and vertical sync signals from a main body to a monitor, the display type information including comprising a display code that designates the a video signal display type, wherein the display code comprises a recognition code for designating a kind of the corresponding display type information, and data corresponding to the recognition code;
and

detecting a display type of the transmitted video signal using the display type information, and displaying the video signal to match the display type.

13. (Original) The method as claimed in claim 12, wherein the display type information is synchronized with the vertical sync signal

14. (Currently Amended) A method of interfacing video information, comprising:
dividing display type information of a video signal into at least two parts;

transmitting divided display type information of a the video signal in ~~at least~~
~~one each~~ of a horizontal sync signal and the video signal, respectively, from a main body, the
display type information including a display code that designates the video signal display type;
and

detecting a display type of the transmitted video signal using the display type
information.

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15. (Original) The method as claimed in claim 14, wherein the main body
synchronizes the display type information with the vertical sync signal.

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16. (Previously Amended) The method as claimed in claim 14, further comprising
transmitting a vertical sync signal from the main body to the monitor, wherein the vertical
sync signal comprises a clock pulse for recognizing the display type information.

17. (Previously Amended) A method of interfacing video information,
comprising:

dividing display type information of R, G, B video signals, the display type
information including a recognition code that designates the video signal display type and
data corresponding to the recognition code;

embedding the divided display type information into a horizontal sync signal and at least one of the R, G, and B video signals, respectively;

transmitting to a monitor the horizontal sync signal, a vertical sync signal, and the video signals;

decoding and reassembling the display type information; and

detecting a display type of the transmitted video signal using the reassembled display type information.

18. (Original) The method as claimed in claim 17, wherein the main body synchronizes the display type information with the vertical sync signal.

19. (Original) The method as claimed in claim 17, wherein a clock pulse for recognizing the display type information is included in the vertical sync signal.

20. Previously Cancelled

21. Previously Cancelled

22. (Original) The device of claim 1, wherein the display information comprises a number of dots for a horizontal period, a number of backporches for the horizontal period, a

number of horizontal lines for a vertical period, and a number of horizontal lines of a backporch for the vertical period.

23. (Original) The device of claim 1, wherein the video signal comprises a RGB signal, a horizontal sync signal, and a vertical sync signal.

24. (Currently Amended) The device of claim 1, wherein the display information is further transmitted in serial data.

25. Previously Cancelled

26. (Currently Amended) An apparatus for interfacing video information, comprising:

a computer transmitting horizontal and vertical sync signals, serial data signal and serial clock signals through a display data channel, and a video signal; and

a monitor receiving the horizontal and vertical sync signals, serial data signal and a serial clock signal through the display data channel, and the video signal, wherein a display type information of the video signal, including a display code that designates the video signal display type, is included in one of the serial data signal of the display data channel and the horizontal sync signal, wherein the display code comprises a recognition

code for designating a kind of the corresponding video signal display type data, and data corresponding to the recognition code.

27. (Currently Amended) A method of interfacing video information, comprising:
dividing display type information of a video signal, the display type information including a display code that designates ~~the~~ a video signal display type;
embedding the divided display type information into at least one of a horizontal sync signal, an R video signal, a G video signal, and a B video signal;
embedding a clock pulse for recognizing the display type information in ~~the~~ a vertical sync signal;
transmitting the horizontal sync signal, ~~the~~ the R video signal, ~~the~~ the G video signal, ~~the~~ the B video signal, and ~~the~~ the vertical sync signal from a main body to a monitor; and
detecting ~~a~~ the video signal display type of ~~the transmitted video signal~~ using the display type information.

28. (Currently Amended) The ~~apparatus~~ method of claim 27, wherein the display code comprises a recognition code that designates the video display type and data corresponding to the recognition code.

29. (Previously Added) The apparatus of claim 1, wherein the main body outputs a vertical sync signal including a clock pulse for recognizing the display type information.

30. Currently Cancelled

31. Currently Cancelled

32. (Currently Amended) The apparatus of claim 2, wherein the main body outputs a vertical sync signal including a clock pulse for recognizing the display type information.

33. (Previously Added) The apparatus of claim 4, wherein the display code comprises a recognition code that designates the video display type and data corresponding to the recognition code.

34. (Currently Amended) The apparatus of claim 4, wherein the vertical sync signal comprises a clock pulse for recognizing the display type information.

35. (Currently Amended) The apparatus of claim 5, wherein the display code comprises a recognition code that designates the ~~video~~ signal display type and data corresponding to the recognition code.

36. (Currently Amended) The apparatus of claim 5, wherein the vertical sync signal comprises a clock pulse for recognizing the display type information.

37. (Currently Amended) The ~~apparatus~~ method of claim 8, wherein the display code comprises a recognition code that designates the video display type and data corresponding to the recognition code.

38. (Currently Amended) The ~~apparatus~~ method of claim 8, wherein the vertical sync signal comprises a clock pulse for recognizing the display type information.

39. Currently Cancelled

40. (Currently Amended) The ~~apparatus~~ method of claim 12, wherein the vertical sync signal comprises a clock pulse for recognizing the display type information.

41. (Currently Amended) The ~~apparatus~~ method of claim 14, wherein the display code comprises a recognition code that designates the video signal display type and data corresponding to the recognition code.

42. Currently Cancelled

43. (Currently Amended) The apparatus of claim 26, wherein the vertical sync signal comprises a clock pulse for recognizing the display type information.

44. (New) The apparatus as claimed in claim 1, wherein the display type information is divided to comprise at least two parts, and wherein the divided display type information is embedded into a horizontal sync signal and at least one of the R, G, and B video signals, respectively.

45. (New) The interface as claimed in claim 2, wherein the information relating to the video signal display type is divided to comprise divided display type information having at least two parts, and wherein the divided display type information is embedded into a horizontal sync signal and at least one of the R, G, and B video signals, respectively.

46. (New) The method as claimed in claim 12, wherein the display type information is divided to comprise divided display type information having at least two parts, and wherein at least one part of the divided display type information is embedded into one of a horizontal sync signal and at least one of the R, G, and B video signals, respectively.

Sub B. 47. (New) The method of claim 14, wherein the display type information comprises a recognition code for designating a kind of the corresponding display type information, and data corresponding to the recognition code.

48. (New) The apparatus as claimed in claim 26, wherein the display type information is divided to comprise divided display type information having at least two parts, and wherein the divided display type information is embedded into a horizontal sync signal and at least one of the R, G, and B video signals, respectively.
